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REMARKS

Claims 1 and 6 have been amended. Claims 1 – 27 are currently pending in this

Application. Reconsideration and further examination is respectfully requested.

Priority

The Office action asserted that the Applicants have not complied with conditions for

receiving the benefit of an earlier filing date under 35 U.S.C. 119 by failing to comply with the

requirements of the 1ˢᵗ paragraph of 35 U.S.C. 112. The Applicants respectfully disagree. The

Applicants assert that the Provisional Application No. 60/225,335 filed on August 15, 2000

("Provisional") provides a fully enabling written description of implementations described by the

currently pending claims.

Generally, the Provisional describes an Optical Service Agent (OSA) that interacts with

an Automatic Optical Switched Network (ASON). The OSA ascertains the high-level

communication requirements and non-requirements of a network user. The Agent maps the high-

level requirements to a set of lower level optical network communication services, and interacts

with the ASON to obtain the lower level services for the user.   (Provisional page 4 paragraphs 2

– 3).

Particularly, regarding claims 1, 6, 13, and 22, ascertainment of high-level communication

requirements and non-requirements and determination of lower level communication services is

described as follows. At Provisional p. 4 par. 5, policy-based bandwidth management is

described as an exemplary OSA application. OSA leverages the lower-level automatic switched

capabilities of the optical core based on the high-level policies. For example, based on configured

policies ("high-level requirements"), OSA can monitor bandwidth utilization and raise or lower

bandwidth as required ("lower-level communication services"). (p. 4 par. 6.) See also

"Advanced reservation/Time of day" (p. 5 par. 1) wherein a high-level backup application is

mapped to a lower-level service for time dependent provision of extra bandwidth. See also

"Bandwidth Broker/Auction" (p. 5 par. 2) wherein a high-level price requirement is mapped to a

lower-level provision of bandwidth from a particular provider. (See also Provisional Attachment

1 p. 10 for examples.) At p. 6 par. 3, lower-level communication services are particularly

described as optical information type, time of day and duration of path, directionality, protection

class, bit error rate, and much more. See also Attachment 1 to the Provisional. P. 4 – 5 describe

OSA control of ASON "control knobs" to map high-level services to optical networks.

Attachment p. 7 shows high-level network management and optimization services mapped to a

lower-level signaling layer.

Regarding claims 2, 7, 14, and 23, see p. 8 last paragraph, wherein OSA is described as

requesting and mapping services from the optical core to the client network or application.

Further, Attachment 1 p. 7 shows a pictorial representation of such mapping.

Regarding claims 3, 8, 15, and 24, the Provisional is replete with references to the

interaction between the OSA and the ASON ("core optical communication network"). See for

example p. 3 par. 3.

Regarding claim 4, it is clear that the Provisional is replete with references to ASON.

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Regarding claims 5, 11, 18, and 25, the Provisional describes interaction between different

OSA instances across the ASON. See generally p. 8, describing interactions between OSA-

enabled systems. The OSA-enabled (or non-OSA-enabled) end systems are "peers".

Regarding claims 9, 10, 16, 17, and 21, the Provisional is replete with references to the

UNI. See for example p. 6 – 8, and Figs. 4 – 6.

Regarding claim 27, 19, and 26, see p. 14 par. 4, describing setting up lightpaths between

peers.

Regarding claim 12, various user applications requiring communications services from an

optical communication network (for example "policy based bandwidth management"

applications) have been set forth with regard to claims 1 and 6. The Provisional is replete with

references to the optical service agent for managing connection quality. Examples have been

described in the support set forth for claims 1 – 6.

Regarding claim 20, the optical communication network and network user are clearly set

forth in the Provisional. Support in the Provisional for an OSA for obtaining optical

communication services via a UNI has been previously described with regard to claims 1 – 19.

The Applicants therefore respectfully assert that the Application does comply with the

requirements of the 1ˢᵗ paragraph of 35 U.S.C. 112. The Application should therefore receive the

benefit of the filing date of Provisional Application No. 60/225,335: August 15, 2000.

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<u>Claim Rejections – 35 USC § 112</u>

Claims 13 – 19 were rejected under 35 U.S.C. 112, 2nd paragraph, as being indefinite

because of the recitation "of claim 12" in the body of the claims. Due to a typographical error,

the claims were misnumbered. As the Office Action indicated, the misnumbered claim 12 has

been renumbered claim 27. The Applicants therefore respectfully request that this rejection be

withdrawn.

<u>Claim Rejections – 35 USC § 102</u>

Claims 1, 2, 5, 6, and 7 were rejected under 35 U.S.C. 102(e) as being anticipated by

Naveh et al., US Patent No. 6,466,984 B1 (Naveh). This rejection is respectfully traversed.

The Applicants' exemplary claim 1 sets forth:

"A method for managing connection quality for a user in an optical communication
system, the method comprising:
        ascertaining high-level communication requirements and non-requirements
of the user;
        determining a set of lower level optical network communication services
for the user based upon the high-level communication requirements and non-
requirements of the user; and
        obtaining the lower-level communication services for the user."

Optical network communication services have heretofore been manually configured

without regard for the requirements of the user. The Applicants innovation provides a method

for managing connection quality for a user in an optical communication system, wherein a set of

lower level optical network communication services is provided for the user based on the high-

level communication requirements and non-requirements of the user.

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In contrast, Naveh describes one of the known forms of policy servers for enforcing

policies in an IP network. Naveh does not address optical communications networks at all. It is

thus clear that Naveh fails to teach or suggest the Applicants' claimed step of "determining a set

of lower level optical network communication services for the user based upon the high-level

communication requirements and non-requirements of the user". The Applicants therefore

respectfully assert that claim 1 and its dependent claims 2 and 5 are in condition for allowance.

The Applicants' independent claim 6 includes limitations similar to those of claim 1. The

Applicants therefore respectfully assert that claim 6 and its dependent claim 7 are in condition

for allowance.

Claim Rejections – 35 USC § 103

Claims 3, 4, 8 – 11, 27, and 20 – 26 were rejected under 35 U.S.C. 103(a) as being

unpatentable over Naveh and Graves et al., US Patent Publication No. 2002/0191250 (Graves).

This rejection is respectfully traversed.

The Applicants' Application was filed on August 15, 2001, and is therefore subject to

the American Inventor's Protection Act of 1999 ("AIPA"). The Graves reference has a priority

filing date of June 1, 2001, and a publication date of December 19, 2002. The Graves reference

thus qualifies as prior art under 35 U.S.C. 102(e). The Applicant states in the attached

Statement of Common Ownership that Nortel Networks Ltd. owns the pending Application and

the Graves reference, thus Graves and the pending Application are commonly owned. Thus, in

accordance with 35 U.S.C. 103(c) under AIPA, the Graves reference cannot be applied in a

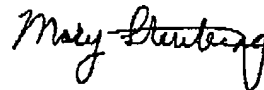Serial No. 09/930095   - 13.-   Art Unit: 2633

rejection under 35 U.S.C. 103(a). The Applicants therefore respectfully assert that this rejection

is obviated.

Applicants have made a diligent effort to place the claims in condition for allowance.

However, should there remain unresolved issues that require adverse action, it is respectfully

requested that the Examiner telephone the undersigned, Applicants' Attorney at 978-264-6664 so

that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now

considered to be in condition for allowance and such action is earnestly solicited.   .

Respectfully Submitted,

06/07/2005

Date

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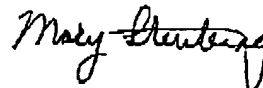Serial No. 09/930095   - 14 -   Art Unit: 2633

<u>Statement of Common Ownership</u>

The pending Application, Appl. No. 09/930,095 to Monga, and the Patent Publication

Pub. No. 2002/0191250 to Graves, were, at the time the invention of Application 09/930,095

was made, owned by Nortel Networks Limited, 380 St. Antoine Street West, 8th Floor, Montreal,

Quebec H2Y 3Y4, Canada.

Respectfully Submitted,

06/07/2005
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